| Technical Service Bulletin | GROUP | NUMBER |
| :---: | :---: | :---: |
|  | CAMPAIGN | 13-01-003 |
|  | DATE <br> January 2013 | MODEL(S) <br> VELOSTER (FS) |
| subject: VELOSTER REAR BRAKE CAL | IPER CABLE VICE CAMPA | IIDE/HOUSING <br> N TN9) |

## * IMPORTANT <br> *** Dealer Stock and Retail Vehicles ***

Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin describes the procedure to inspect and replace the rear caliper cable guide or rear brake caliper housing on some Velosters.


## Applicable Vehicles:

VELOSTER (FS) with Automatic Transmissions (DCT)
Applicable vehicle production range:
From SOP through February 27, 2012

Required Parts:
PART NAME

NOTE: When replacing the Caliper Housing Kit, about 12 ounces $(360 \mathrm{ml})$ of brake fluid will be used and will be automatically reimbursed via sublet amount.

Warranty Information:

| OP CODE | OPERATION | OP TIME |
| :---: | :---: | :---: |
| $20 C 035 R 0$ | Both left and right rear caliper <br> inspection and caliper cable guide <br> replacement | $0.6 \mathrm{M} / \mathrm{H}$ |
| 20 C 035 R 1 | Both left and right rear caliper <br> inspection and caliper housing kit <br> replacement | $1.0 \mathrm{M} / \mathrm{H}$ |

NOTE: Submit Claim on Campaign Claim Entry Screen

## Service Procedure:

Parking Brake Inspection
1.

* NOTE

Verify that the vehicle is in the affected production date range and has an open TN9 via WEBDCS.

Release the parking brake lever (A).

2. Lift the vehicle.

Check the gap between the rear caliper cable guide ( $B$ ) and the caliper lever ( $C$ ) on both sides.
1: Gap of RH side
2 : Gap of LH side
If $(1+2)$ is less than 3 mm , replace the caliper cable guide according to CALIPER CABLE GUIDE REPLACEMENT below.

If $(1+2)$ is 3 mm or more, replace the caliper housing kit according to CALIPER
 HOUSING KIT REPLACEMENT below.

SUBJECT:

## CALIPER CABLE GUIDE REPLACEMENT

1. Remove the left rear caliper flange nut $(A)$.

Tightening Torque :
$21.57 \sim 31.38 \mathrm{Nm}(2.2 \sim 3.2 \mathrm{kgf} . \mathrm{m}$,
$15.91 \sim 23.14 \mathrm{lb}-\mathrm{ft})$

2. Remove the return spring (B).

3. Remove the caliper lever (C) and the parking cable (D).

4. Remove the parking cable fixing clip (E).

5. Remove the cable guide mounting bolt ( F ) and the cable guide (G).

Tightening Torque :
$9.80 \sim 12.74 \mathrm{Nm}$ (1.0~1.3kgf.m, 7.23~9.40 lbft)

6. Remove the dust boot $(\mathrm{H})$.

7. Clean the surface of caliper housing (I).

8. Coat one end of a wood or plastic stick with the supplied grease (J).

9. Apply a generous amount of grease (J) to the surface (I) of caliper housing.

10. Reinstall all the removed parts in reverse order of removal.

## * NOTE

Use the following new parts provided in the kit:

- Cable guide
- Rear caliper flange nut
- Return spring
- Flange bolt


## * NOTE



There should be no gap between the caliper lever (C) and the parking cable guide (G).

Replace the right rear caliper cable guide by repeating steps 1~10.
11. Verify the proper operation of the parking brake.

## CALIPER HOUSING KIT REPLACEMENT

1. Remove both rear wheels $(A)$.

Tightening Torque :
88.25~107.87Nm(9.0~11kgf.m, $65.09 \sim 79.56 \mathrm{lb}-\mathrm{ft})$

2. Remove the return spring (B).

3. Remove the left rear caliper flange nut (C).

Tightening Torque :
21.57~31.38Nm (2.2~3.2 kgf.m, $15.91 \sim 23.14 \mathrm{lb}-\mathrm{ft})$

4. Remove the caliper lever ( $D$ ) and the parking cable (E).

5. Partially loosen the brake hose mounting bolt (F).

Remove 2 guide rod bolts (G).

6. Separate the caliper housing $(H)$ from the rear brake caliper bracket.

## CAUTION

Do not hang the caliper from the brake hose.

Remove brake pads from caliper housing and install into the new caliper.

7. Install the new left caliper housing $(\mathrm{H})$ and tighten 2 guide rod bolts (G) with the specified tightening torque.

Tightening Torque :
21.57~31.38Nm(2.2~3.2kgf.m, $15.91 \sim 23.14 \mathrm{lb}-\mathrm{ft})$

8. Remove the brake hose mounting bolt (I) from the removed caliper housing (H).
9. Install the two new supplied gaskets (J) to top and bottom of the brake hose mounting bolt as shown in the photo.

10. Install the brake hose to the new caliper housing $(\mathrm{H})$ by tightening the brake hose mounting bolt (I) with the specified tightening torque.

Tightening Torque :
$24.51 \sim 29.41 \mathrm{Nm}(2.5 \sim 3.0 \mathrm{kgf.m}, 18.08 \sim 21.69$ $\mathrm{lb}-\mathrm{ft})$

11. Reinstall all the removed parts in reverse order of removal.

## * NOTE

Use the following new parts provided in the kit:

- Caliper housing
- Rear caliper flange nut
- Return spring
- Caliper lever
- 2 Gaskets


Replace the right rear caliper housing kit by repeating step 1~11.

Bleed the brake system according to the shop manual.
12. Verify the proper operation of the parking brake and brake system.

